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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,000	04/02/2004	James Vogeley	4209-26	7279
	7590 02/21/200 NDERHYE, PC	7	EXAMINER	
901 NORTH GLEBE ROAD, 11TH FLOOR			RODRIGUEZ, WILLIAM H	
ARLINGTON, VA 22203			ART UNIT	PAPER NUMBER
			3746	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	02/21/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)

4) Interview Summary (PTO-413)

Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other:

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DETAILED ACTION

This office action is in response to the amendment and remarks filed 12/13/2006. The indicated allowability of claims 2, 3, 8-10, 24, 36 and 74 is withdrawn in view of the newly discovered reference(s) to Takagi et al. (US 7,056,096). Rejections based on the newly cited reference(s) follow.

Claim Objections

1. Claims 26, 27 and 29 are objected to because of the following informalities:

Claim 26 should depend from claim 25 because the pulse width modulator is first positively recited in claim 26 not claim 24. Appropriate correction is required.

Claim 27 should depend from claim 25 because the pulse width modulator is first positively recited in claim 26 not claim 24. Appropriate correction is required.

Claim 29 should depend from claim 28 because the flyback circuit is first positively recited in claim 28 not claim 24. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 2, 3, 8-10, 24, 36 and 74 are rejected under 35 U.S.C. 102(e) as being anticipated by Takagi et al. (US 7,056,096).

Takagi (particularly Figure 6) teaches a pumping system comprising: a pump having a pump body, a piezoelectric actuator 6 situated in the pump body, a driving means comprising a drive circuit which produces a drive signal having a predetermined waveform, a memory having stored waveform shape data, wherein said driving means is used for optimizing at least one operational parameter such as pressure. See particularly Figures 1, 2, 6, 7; and cl. 11 ll. 12-31.

Since Takagi has the same structure as claimed, it is inherent that Takagi's device would be able to perform the recited method steps.

Response to Arguments

4. Applicant's arguments with respect to claims 2, 3, 8-10, 24, 36 and 74 have been considered but are most in view of the new ground(s) of rejection.

Allowable Subject Matter

5. Claims 4-6, 25-34, 37-39 and 75-78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodríguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dr. Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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Villiam H. Rodriguez

Primary Examiner Art Unit 3746

2/15/07

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